

Application No. 10/656,503  
Docket No. 200310119-1

**REMARKS**

Claims 1-25, 33-36, and 38-41 are pending in the present application. Claims 26-32 are withdrawn subject to a restriction requirement, and claim 37 is canceled. Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the office action of September 27, 2007, the following actions were taken:

(1) Claims 10 and 11 were rejected under 35 U.S.C. 112, first paragraph as allegedly failing to comply with the written description requirement;

(2) Claims 1, 4-10, 12-15, and 39-41 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357, in view of U.S. Published Application No. 2001/0039895 of Kawauchi et al. ("Kawauchi") and/or U.S. Patent No. 5,470,816 to Satake et al. ("Satake");

(3) Claims 1, 4-10, 12-15, 17, 20-22, 24, 25, 33, 35 and 38-41 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357 in view of U.S. Patent No. 5,362,536 to Fleming et al. ("Fleming '536") or WIPO Published Application No. WO 03/032299 of Anderson et al. ("Anderson");

(4) Claims 1, 4-15, 17, 20-25, 33, 35, and 38-41 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357 in view of Fleming '536 and Anderson in further view of U.S. Patent No. 5,236,884 to Boggs et al. ("Boggs");

(5) Claims 1-10, 12-22, 24, 25, 33-35 and 38-41 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357, combined with Fleming and Anderson in view of either U.S. Patent No. 2,957,004 to Perkins et al. ("Perkins") or U.S. Patent No. 4,284,704 to Fleming et al. ("Fleming '704"); and

(6) Claims 1-10, 12-22, 24, 25, 33-36, and 38-41 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357, combined with either Fleming '536, or Anderson and either Perkins or Fleming '704, further in view of U.S. Patent No. 4,508,811 to Gravsteijn et al. ("Gravsteijn") and Melles Griot Catalog (1995/96) pp. 49-4 through 49-5.

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**Election/Restriction Requirements:**

On May 4, 2006, in response to the restriction requirement set forth in May 2006, the Applicant's representative made an oral provisional election with traverse to prosecute Group I, claims 1-25 and 33-38. Applicant hereby affirms the election without traverse to prosecute Group I, pending claims readable thereon being 1-25, 33-36, and 38 (with new claims 39-41 added). Applicant also affirms the withdrawal of nonelected claims 26-32 from consideration in the present application.

**Claim Rejections - 35 U.S.C. § 112**

Claims 10 and 11 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the language "cellulose acetate butyrate" was recited twice in claim 10.

Claim 10 has been amended to remove the redundant recitation. Applicant therefore respectfully requests the withdrawal of this rejection.

**Claim Rejections - 35 U.S.C. § 103**

The Examiner has rejected all of the presently pending claims under 35 U.S.C. § 103(a) over a number of references in combination. The Applicant respectfully submits that these claims are patentable over the cited references for the reasons set forth below, and that the rejection should be withdrawn.

Before discussing the obviousness rejections herein, it is thought proper to briefly state what is required to sustain such a rejection. The issue under § 103 is whether the PTO has stated a case of *prima facie* obviousness. According to the MPEP § 2142, the Examiner has the burden and must establish a case of *prima facie* obviousness by showing the prior art reference, or references combined, teach or suggest all the claim limitations in the instant application. The

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Applicant respectfully asserts the Examiner has not satisfied the requirement for establishing a case of *prima facie* obviousness in any of the rejections.

All of the 103 rejections are based on combinations of references using RD 39219 and/or JP 58-008357 as primary references in combination with or in view of other references. RD 39219 introduces an imaging medium for thermal imaging applications with near infrared radiation. The medium includes 1,3-diiminoisoindoline and/or a related phthalocyanine precursor material, a thermally cleavable adduct capable of generating a phenolic compound with reducing properties, and a near infrared absorbing dye. RD 39219 also lists binders as a possible addition to the composition. JP 58-008357 appears to be cumulative to RD 39219 with respect to relevant points. This reference is related primarily to a heat sensitive copying paper. In the specification, particularly the examples, the compositions are described as being heated to 150 °C, where color change was noted. Similar to RD 39219, JP 58-008358 does not teach or suggest extremely fast development times as required by the currently pending claims. Nor does JP 58-008358 teach the use of an infrared radiation spot size within the range of about 1 to 200 micrometers.

The present independent claims 1, 16, 17, and 33 each require a color forming composition configured for development in less than about 1 msec when exposed to about 30 – 50 mW IR at a spot size from about 1 – 200 micrometers. As the Examiner has acknowledged, this recitation describes the sensitivity of the composition. As such, it is a limitation of each of these claims, and it must be disclosed or inherent in the cited prior art before a *prima facie* case for obviousness based thereupon can be supported. As the Applicant has stated above, the cited references do not teach a color forming composition so configured. In the Office Action of September 27, 2007, Examiner argued that the teaching of IR absorber present in amounts of ~4% would “inherently sensitize the compositions within the bounds of the claims.” Applicant submits that the Examiner has provided insufficient support for this conclusion.

Those having skill in the art will appreciate that the sensitivity of such color forming compounds is a function of a number of factors, including the nature and properties of the infrared absorber, phthalocyanine precursor, and binder, as well as the relative concentrations of each. This is supported in Applicant's specification. See e.g. paragraphs 0053-0055. One skilled in the art will also recognize that not every formulation based on a combination of

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components will exhibit the same sensitivity and therefore the same development time. Given a particular combination of components, one skilled in the art may create a number of formulations exhibiting a given response time to a given set of radiation parameters, where said response time is achievable by adjusting relative proportions of the components based upon their individual properties. Similarly, one may use the same approach to formulate compositions having different sensitivity characteristics. It is these adjustments that to which the term "configured" refers in claims 1, 16, 17 and 33. As such, the recited sensitivity characteristics are a limitation on the scope of the claim that alerts one skilled in the art as to which of the many possible configurations are encompassed by the present claims.

To render the present claims obvious, the cited prior art must teach each and every element of those claims, either expressly or inherently. As stated before, the sensitivity of color forming compositions is not expressly disclosed in the cited references. As for the alleged inherent disclosure of this limitation, the Federal Circuit is clear regarding inherent limitations. The courts have said that "extrinsic evidence must make it clear that the missing descriptive matter was necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill." *In re Robertson*, 169 F.3d 743 (Fed Cir. 1999). Absent such evidence, a rejection based on inherency cannot be maintained. In light of the discussion above, Applicant submits that a reference or combination of references that only provides the components of the composition without teaching the sensitivity characteristics cannot be said to expressly or inherently disclose those characteristics.

In failing to disclose an element of claims 1, 16, 17, and 33, neither RD 39219 nor JP 58-008357 support a *prima facie* case for obviousness of those claims. The same therefore applies to the remaining pending claims which each depend from one of these claims. Furthermore, none of the other references cited by the Examiner remedy the deficiency of RD 39219 nor JP 58-008357. Therefore, Applicant respectfully submits that all of the pending claims are allowable, and urges the Examiner to withdraw these rejections.

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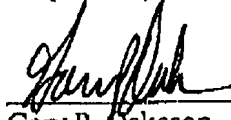
CONCLUSION

In light of the above, Applicant respectfully submits that pending claims 1-25, 33-36, and 38-41 are in condition for allowance. Therefore, Applicant requests that the rejections and objections be withdrawn, and that the claims be allowed and passed to issue. If any impediment to the allowance of these claims remains after entry of this Amendment, the Examiner is encouraged to call Gary Oakeson at (801) 566-6633 so that such matters may be resolved as expeditiously as possible.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 08-2025.

DATED this 26<sup>th</sup> day of October, 2007.

Respectfully submitted,



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